

# Babaamaajimowin Aking

*News From the Earth*

## In Memory

This issue of the KBIC NRD Newsletter is dedicated to our former Director, Todd Warner. Todd was the director of the NRD from 2005 until his untimely passing in July of 2012.

Todd will be remembered for his innovative thinking and the ease in which he could transition between disciplines and link the entire Department together on various projects. Todd will also be remembered for his professionalism, his ability to establish partnerships with other agencies and organizations and secure funding to create additional jobs at the NRD, his unique perspective that encouraged you to consider and approach issues in different ways, and of course his laugh.

One of the many projects Todd established was the KBIC Youth Conservation Corps (YCC) with the Superior Watershed Partnership (<http://www.superiorwatersheds.org/youthconservation.php>). He believed it was vitally important that young adults learn the importance of protecting the

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natural environment. Partnering with Superior Watershed Partnership has given tribal youth an opportunity to work with many different professionals in Natural Resources to learn if they would be interested in pursuing a career in that discipline. Another noteworthy accomplishment was the Reservation wide Rapid Watershed Assessment (RWA) to identify deteriorating culverts and road crossings that may be impeding fish passage and impacting water quality. The RWA took place in 2007 and when completed, problem areas were prioritized for remediation. This summer (2012) in partnership with USDA-NRCS and with Great Lakes Restoration Initiative (GLRI) funding, culvert replacement has started. This project truly showcased Todd's innovative thinking. Replacing these culverts will not only improve fish passage and habitat water quality, but also prepares these areas for the potential for surges or increases in water flow that are predicted in the future due to climate change.

When Todd wasn't at work (which wasn't very often!) he enjoyed spending time outdoors with his beloved dogs, Speedy and



Todd Warner  
KBIC NRD Director 2005-2012

Boomer, fishing, camping, hiking or just enjoying nature. Todd's smile and sense of humor will be missed around the office.

In early September NRD staff was informed that Todd was chosen to be the 2012 recipient of the Native American Fish & Wildlife Society (NAFWS) *Biol-ogist of the Year Award*. The award was accepted on his behalf during the NAFWS Great Lakes Regional Conference in mid-September by several NRD employees.

**The family will host a celebration of Todd's life on Saturday, September 22, 1:00 p.m., 421 E. Crescent Street, Marquette, MI.** On behalf of the Warner family: Memorials can be made to the Todd Warner memorial fund, c/o Superior Watershed Partnership, 2 Peter White Drive, Presque Isle Park, Marquette, MI 49855. Funds will support scholarships to KBIC youth. Link to donate on-line: <http://www.superiorwatersheds.org/online.php>

## Retired Lake Trout Stocking

In mid-June KBIC NRD staff, community members and summer youth crew workers had the opportunity to assist in the release of over 600 retired brood stock lake trout from the Iron River National Fish Hatchery (NFH) of Wisconsin. The fish were 10 or 12 years of age and the average weight was 12-13lbs per individual fish. According to the USFWS, these fish, which are Lake Superior Apostle Island strain, were no longer needed as brood stock based on changes in stocking strategies for the Upper Great Lakes. New brood stock for the Upper Great Lakes will come from Lake Huron. According to KBIC NRD Fisheries and Wildlife Biologist, Gene Mensch, "several options were explored regarding destinations and management uses for these fish. Ultimately it was decided that Keweenaw Bay stocking would serve the dual purpose of providing an enhancement to local fishing opportunities while also allowing these fish to return to the system they were derived from."



*Jordan River Hatchery Truck transporting lake trout to Baraga*



*USFWS staff offloading lake trout*

The release took place during the late morning and early afternoon on Tuesday, June 19<sup>th</sup>. Staff and equipment from Iron River NFH, Pindills Creek NFH, and Jordan River NFH were all on hand to make sure the transfer and stocking of the lake trout was successful. NFH staff used large nets to scoop 1-3 fish at a time from the tanks and transfer them to KBIC NRD staff and youth crew members on the ground that were ready to tag each fish and transfer them safely to the water. Many of the fish hung around the dock, a bit confused by their new, open surroundings. Other fish swam off quickly without looking back.

The fish are safe for consumption and several anglers have reported that the fish are "high quality for the table." All fish were double fin-clipped (adipose and left pectoral) and approximately 50% of the fish were floy tagged (KBIC-BLUE research tags). Anglers capturing a tagged lake trout can remove the tag and mail it to the KBIC NRD to receive a small reward and information about the fish (14359 Pequaming Road, L'Anse, MI 49946). If you choose to release the fish, you can right down the tag number and call it in to (906) 524-5757 ext. 12 or 17.



*Summer Youth Corps worker Sierra Ayres releasing several retired lake trout into Keweenaw Bay*



*Retired lake trout with floy tag ready for release*



## 2012 Walleye Stocking

In April of this year, the KBIC received 80,000 walleye fry from the Bad River Band of Lake Superior Chippewa's hatchery facility (Bad River Strain surplus fish). These fry were placed into one of the KBIC's walleye rearing ponds. In April and early May of this year, walleye eggs were collected from Portage Lake by KBNRD staff and were incubated, hatched and placed into the second KBIC walleye rearing pond. Over 6,000 fingerlings, averaging 2-3 inches in length, were collected from the ponds and stocked into Portage Lake. To reduce the occurrence of cannibalism in the walleye ponds, over 1,500 six inch walleye were also removed from the ponds and stocked into Keweenaw Bay. Minnows were also purchased for feeding.

In May, the Sault Ste. Marie Tribe of Chippewa Indians and the Inter-Tribal Fisheries Assessment Program (ITFAP) donated 1,000,000 walleye fry to the KBIC (Back Bay Lake Superior strain). Of the 1,000,000 fry, 350,000 were stocked into Huron Bay, 500,000 into Portage Lake, 100,000 were retained for KBIC walleye ponds operation and 50,000 died before arriving to us from Sault Ste. Marie.

As of late July of this year a total of 859,638 walleye had been stocked into the following waters: 506,287 to Portage Lake, 1,786 to Keweenaw Bay and 351,565 to Huron Bay. In 2011 several thousand walleye were held in the rearing ponds until early fall as part of an extended growth trial. This occurred again in 2012. Just under 400 extended growth walleye (average length of 8.7 inches) were stocked into Portage Lake in early September. Total walleye stocked for 2012 (fry, fingerlings, and fish) was 860,768.



*NRD staff stocking walleye in L'Anse*



*Varying size class walleye from rearing ponds stocked in September*

## Update on the Hatchery Facility Upgrades

In the fall 2011 issue we highlighted our hatchery upgrades from raceways to re-circulating water tanks in our main hatchery facility. Since last fall we have installed a common water head tank, groundwater pump motor controls, new and additional fish rearing tanks, monitoring systems, a new alarm system, added oxygen injection equipment, and reconfigured the water distribution system. Reductions in energy and water use are advantages of using the variable frequency drive with our pumping. The recirculation aquaculture system has been recycling slightly less than 50% of all water used in the main building since August 2012. Two years ago, 584 gallons per minute were needed for our facilities versus the 300 gallons per minute (only 100 in the main building) used now. There has been a noticeable reduction in energy consumption with well pumping which we hope to report more on later in the year.



*Re-circulating tanks*



## *Fish Passage/Culvert Replacement Project Underway*

Reservation streams are home to brook trout and many other cold water fish species. It is important to maintain and when necessary restore connectivity of the water systems on the Reservation to maintain/restore overall health of aquatic communities and watersheds. With Great Lakes Restoration Initiative (GLRI) support, the KBIC (NRD and Public Works) is working with USDA-NRCS and the Baraga County Road Commission (BCRC) to improve the health of several stream systems in and around the Reservation by installing culverts or bridges that allow passage of aquatic organisms upstream and downstream. Two of the twelve perched culvert locations slated for improvement are currently in progress. Road culverts are improved by replacing those that are either too small or perched above the river bottom, thus impeding fish passage and proper water flow.



*Gomanche Creek culvert replacement on Indian Road, Baraga County*



*Falls River culvert being removed on Golf Course Road, Baraga County*

The KBIC Public Works Department is working on potentially finishing two culvert projects prior to snowfall; the current culvert replacement in progress is the Gomanche Creek crossing on Indian Road which is scheduled to be complete in September of this year. The BCRC is working on the Falls River culvert on Golf Course Road with matching funds provided by the KBIC. The culvert is being removed, the river bottom restored and a bridge installed. The BCRC anticipates this project to be complete by the end of September this year.

## *Summer Youth*



*Summer Youth Conservation Corps with SWP supervisor, Joy Bender Hadley (on far left)*

KBIC and the Superior Watershed Partnership (SWP) teamed up for the fourth year in a row to offer a Youth Conservation Corps (YCC) for tribal youth. This year's crew was supervised by Joy Bender Hadley from SWP. YCC activities included (but were not limited to) beach clean-ups, invasive species control, native plantings at Sand Point, trail maintenance, hatchery fish marking and stocking, lamprey monitoring, walleye pond maintenance, wildlife remote camera maintenance, turtle habitat creation, and turtle surveys. We hope to be able to offer this program every year to provide opportunities for tribal youth to get outdoors and learn about natural resources and natural resource stewardship.



*Placing turtle platforms in the water at Mud Lakes*



## *KBIC Partners with LRBOI and Grand Valley State for Pine Marten Study*

A pilot capture/recapture population study on pine marten is taking place on the L'Anse Reservation. The Little River Band of Ottawa Indians (LRBOI) and Grand Valley State University (GVSU) have been assisting KBIC NRD with analysis of camera data for the KBIC's upcoming Tribal Wildlife Management Plan. During numerous discussions, they asked if it would be possible to come to L'Anse and capture pine marten for a health and genetic study they are doing throughout Michigan. With Council approval, we arranged a week of pine marten trapping in July to allow LRBOI and GVSU to collect blood samples. We also took the opportunity to attach ear tags for capture/recapture purposes. Two biologists, Jill Witt (LRBOI) and Paul Keenlance (GVSU) and a veterinarian, Maria Spriggs (Mesker Park Zoo) were the main contributors to this effort. Three biologists from the Sault Ste. Marie Tribe also accompanied us for several days of trapping to learn techniques.



*Lyndon Ekdahl holds one of the live-captured pine marten after processing*



*Pine marten (*Martes americana*) in live trap*

Five pine marten were caught in seven days of trapping. Camera traps are being maintained to record the number of tagged versus untagged animals detected over a three month period at four separate study locations. Data collected will be used to estimate a local population size. Although five marten is a small sample size, it will provide a snapshot of our local population. Final results from this study will be reported in a future newsletter.

Without this valuable partnership, a pilot study of this magnitude would have cost the KBIC thousands of dollars. The KBIC NRD values the mutual benefits that come from strong partnerships and we look forward to future opportunities with these as well as other organizations in the future.



*Vets work quickly to collect important information about the health of this captured pine marten*



## 2012 NRD Facility Tours

By Valoree Gagnon

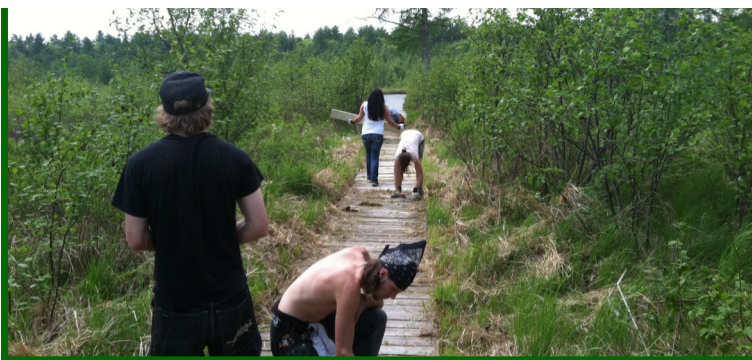
Enhancing and sustaining natural resources in the Lake Superior basin requires a commitment to environmental education. An important part of this outreach is accomplished through the KBIC NRD facility tours. Of course brook and lake trout continue to be the main attraction but Department tours have expanded well beyond its Hatchery operations. So far in 2012, the KBIC NRD has had over 300 visitors from the KBIC BHK and Head Start programs, area public schools, state University students (NMU and MTU), local sportsman's club members, Community members, and other visitors to the area. As the KBIC NRD staff and expertise have grown in recent years, Department tours have expanded to reflect this growth. This summer the KBIC NRD hosted a number of tours that included the operations and activities of our Fish Hatchery, Walleye Ponds, native-species Greenhouse, the Great Lakes restoration site at Sand Point, and presentations about local Brownfield's remediation and regional mining impacts.



*Hancock Middle School Students learning about the KBIC Hatchery with KBIC Fisheries and Wildlife Biologist, Gene Mensch*



*Hancock Middle School Students touring the walleye rearing ponds*



*Bridge school students clearing and repairing the boardwalk to Hidden Lake at Sand Point*

Two of our largest tours on record included the Hancock Middle School (HMS) eighth-grade class and Hancock's Bridge High School (HBHS). These schools heard about the KBIC NRD through a National Science Foundation (NFS) program at MTU where two L'Anse locals, Valoree Gagnon (HMS) and Andrew Kozich (HBHS) partnered with area schools and teachers. The program is focused on increasing watershed science understanding, communicating research that emphasizes Native American perspectives, and connecting local impacts to those at regional and global levels. Valoree had been teaching students about her graduate work based on the KBIC Tribal Fish Harvest and her experiences volunteering with the Department. 'Hooked' to education, HMS asked if a KBIC NRD fieldtrip and Hatchery tour could be arranged.

A few weeks later, Valoree brought sixty-seven excited students and three teachers from HMS for a staff-guided tour of the Hatchery facility and Greenhouse which included staff presentations. The next stop on the fieldtrip was the walleye ponds. There, students helped distribute alfalfa in the ponds. Later that afternoon they toured the Sand Point Lighthouse, helped assess fish from a Sand Point pond fyke net, and walked the trails of the Sand Point Restoration Project. When asked about the schools experience, HMS Science teacher Heather Bradway replied, "I was impressed with the overall presentation and scope of natural resource management taking place; everything from native plants to fish to brownfield restoration – they have the whole package." Bradway also noted that her students really enjoyed listening to fisheries and wildlife biologist, Gene Mensch. Later the same week, twenty-seven students and teachers from the Hancock Bridge High School participated in a similar tour. HBHS also spent an afternoon helping to clear the walking trails at the Sand Point recreation area and improving wildlife habitat in the area.

If you or your organization is interested in learning more about natural resources in the Lake Superior basin through a KBIC NRD tour, please contact the Department to check on availability (906-524-5757). Tours can be scheduled at any time, depending on weather and seasonal fieldwork. We hope to see you soon!

## *Household Hazardous & Electronic Waste Collection and Milk Run*

KBIC hosted a free household hazardous and electronic waste collection event in June. The collection event was open to tribal members and all non-tribal residents of Baraga County. Approximately 320 used electronic devices such as TVs, computers, monitors, and microwaves were collected as well as close to 7,000 pounds of household hazardous waste. Wastes collected included used oil, old gasoline, pesticides, mercury, oil filters, car batteries, and other hazardous materials. The collection event was considered a big success by all involved considering that Baraga County only has about 8,860 residents. **A total of 16,918 pounds of waste was collected during the event.**

All waste collected will be recycled or disposed of depending upon material type. Proper handling and disposal of hazardous waste materials is a critical part of preventing potential contaminant release to the Lake Superior ecosystem which helps protect this precious resource. With the help of U.S. EPA Great Lakes Restoration Initiative funding we will be able to establish a regular collection program, leading to increased protections for our wonderful Lake Superior.

KBIC also hosted a hazardous and electronic waste “milk run” collection event in May. The “milk run” was through Northwest Regional Planning Commission and was designed to accept hazardous and electronic wastes from municipalities, businesses, and schools in Baraga County. Items accepted included monitors, CPU’s, printers, faxes and copy machines, peripherals, TVs, floor copiers, keyboards, fluorescent bulbs, oil-based paint, solvents or adhesives, antifreeze, aerosols, batteries, poison solids, pesticides (solid or liquid), ballasts, and other items considered hazardous, especially items containing mercury. **A total of 12,574 pounds of waste was collected during the event.**

A fall “milk run” event is planned, as well as a household hazardous collection and electronic waste collection event for **September 29, 2012 from 10:00-2:00 at the Baraga Casino parking lot.**



*Collection trucks*



*Container of mercury collected at the June event*



*Piles of electronic waste for disposal*



## 10th Annual KBIC Kid's Fishing Derby



*The big winner of the day*

This year marked the 10<sup>th</sup> annual KBIC Kid's Fishing Derby held at Sand Point near the Lighthouse Pond in Baraga. Attendance was record breaking with 370 kids participating (up from 353 in 2011). Over 100 people volunteered during the Derby including local sportsman's club members, state and federal agency employees, community members, 4-H, KBIC summer youth programs, and many more.

Activities include the ever popular pond fishing contest, inner tube casting, Velcro fishing, big trout tank fishing, moon walks, and other small games. Food and beverages are free for everyone in attendance. The Lighthouse Pond is stocked with bluegill, rock bass, small mouth bass, pumpkinseed sunfish, and yellow perch. Prizes were awarded for the most fish, biggest fish, and for catching a tagged fish. The grand prize went to Kegan Laufenberg for catching 3 fish, one measuring 24 inches. Kegan received a trophy, \$100 gift card to Walmart and the first visit to the big prize tent. No kid left the Derby empty handed; each registered fisher kid received a fishing pole or a trip to the special prize tent if they brought their own fishing pole from home.

In addition to being a fun day for families, the Derby also provides the opportunity to honor a family in the community that has exercised their treaty fishing rights. This year's Derby was held in honor of the Gauthier Family. The family began commercial fishing in the 1940's and continued with the tradition until the early 2000's. Although everyone in the family has retired from commercial fishing, the family continues to exercise their treaty rights through subsistence hunting, fishing, and gathering.

**THANK YOU** to all of our volunteers and donators. This event would not be a success without your generous donations of time, money and/or prizes.



*Fisher kids patiently wait to see if their number will be called for a chance in the big prize tent*

## Greenhouse Updates

Twenty-four plant species were successfully propagated and transplanted to Sand Point this spring/summer of which nine were new. There have been a total of fifty plant species transplanted to the native plant garden at Sand Point over the last two years, all the species planted last year took hold and regenerated this year. The greenhouse currently holds two species of milkweed, two species of goldenrods, black-eyed susans, coreopsis, primrose, sweet grass, and bee balm, which are being used for fall plantings at Sand Point.



*Greenhouse progress in early May*



## Lake Superior Day

The KBIC NRD organized a beach clean-up on July 13th in celebration of Lake Superior Day. About 50 people including KBIC NRD staff, tribal youth crews, and area community members cleaned approximately 7 miles of Lake Superior beaches from just north of Assinins, down around the head of Keweenaw Bay out to Pequaming. The day started with an opening ceremony performed by KBIC members, Charlotte Loonsfoot and Jessica Koski. The cleanup was followed by a luncheon provided by the KBIC WHIP Taskforce at the Sand Point Light House day use area. After lunch participants enjoyed time canoeing on the Lake. “It was hot out, but it was a rewarding effort” said Erin Johnston, KBIC Lake Superior Program Coordinator. “We estimate we collected and disposed of about 30 bags of trash off the beaches. It was nice to take a day to reflect on how lucky we are to live where we do and share that with others.”



Summer youth cleaning the beach along the Ojibwa Recreation Area campground

Lake Superior Day, which was created in the early 1990's by the Binational Forum (<http://www.superiorforum.org/>), is officially the third Sunday in July. The Binational Forum, a group of volunteers from the United States and Canada working together to protect Lake Superior, states that Lake Superior Day is a “special day held around the lake to highlight the importance of the world’s largest freshwater lake to the basin’s environment and economy.” The KBIC will continue to hold annual events in honor of Lake Superior Day, but we encourage the community to treat every day as Lake Superior Day and take actions to restore and protect our beautiful Lake. Remember to take your trash with you as the beaches are a shared resource for everyone to enjoy.

## Invasive Plant Species Monitoring and Control

This summer, with the help of additional resources and staff, the NRD plants program was able to move forward with their invasive species monitoring and control on the reservation. Locations throughout the reservation, including eight invasive plant species, were inventoried, and active control measures were carried out on four of those eight species. The NRD plants program will continue to monitor the presence of known invasive species on the reservation and work with partners to identify new species and their locations.

	Common name	Scientific name	Controlled in 2012	Control method
1	Exotic honeysuckle	<i>Lonicera spp.</i>		
2	Japanese barberry	<i>Berberis thunbergii</i>	X	Chemical
3	Purple loosestrife	<i>Lythrum salicaria</i>	X	Manual/Chemical/Biological
4	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>	X	Observation
5	Leafy spurge	<i>Euphorbia esula L.</i>		
6	Spotted knapweed	<i>Centaurea stoebe</i>	X	Manual
7	Giant knotweed	<i>Polygonum sachalinense</i>		
8	Marsh thistle	<i>Cirsium palustre</i>	X	Manual
9	Winged pigweed	<i>Cycoloma atriplicifloium</i>		

## Summer Hires Advance KBIC Plant Program

With the wide array of activities that go on around the NRD in the summer, we often find that we need extra help to get things done efficiently. This summer NRD worked with the KBIC TERO and CEO's office, as well as the Bureau of Indian Affairs (BIA) to provide jobs for tribal members and increase capacity of the NRD. Through the Workforce Investment Act (WIA) the CEO office and TERO were able to provide the NRD with three full-time employees for 2 months. These WIA employees worked on a variety of projects including hatchery maintenance, trail maintenance, native plants and invasive control, and wildlife remote camera work. As a result of their exemplary performance, training received, and the increased need in the NRD invasive species program, the CEO's office was able to identify money through the KBIC Forestry Program to keep these employees on at the NRD.



*Patrick LaPointe, Jaimee Loonsfoot, Georgenia Earring and Josh Drury ready for an afternoon of invasive plant control*

It was recognized that a vital part of Reservation Forest Management involves invasive species inventory and control, mapping of harvesting and gathering areas, and ash seed collection. Additional funding was provided by the Great Lakes Restoration Initiative (GLRI) through the BIA to fund three full-time positions and one part-time position for the summer of 2012. Two additional temporary hires worked for 5 weeks. These positions were hired specifically for the plant program, focusing on invasive species inventory and control. We hope to be able to provide employment opportunities at this advanced level in the future. The following individuals were hired through the initiatives:

### WIA Hires

- Mike Lofquist (now under Plants Program)
- Jaimee Loonsfoot (now under Plants Program)
- Robert Ellsworth (temporary appointment to Hatchery)

### BIA-GLRI Hires

- Georgenia Earring
- Patrick LaPointe
- Stuart Swartz
- Stephanie Kozich (temporary appointment)
- Charlotte Loonsfoot (temporary appointment)
- Josh Drury (part-time)

## NRD Welcomes New Air Quality Specialist, Lauren Nenadovich

Lauren was born and raised in the Metro Detroit area, but went to college in the Upper Peninsula and is hoping to have the privilege of permanently calling the U.P. home. Lauren attended Lake Superior State University for two years before graduating from Northern Michigan University with a Bachelor's of Science in Environmental Science this past May. Lauren says that she loves the Upper Peninsula and is incredibly thankful for the opportunity to stay here and begin her environmental career.

Lauren will be working on the Tribe's first air quality grant which is in place to develop a basic assessment of the air quality to prepare for an emissions inventory in the future. She will address the major concerns of this area

(both ambient and indoor), causes of air pollution, effects on health and the environment, what can be done to better air quality, as well as other topics along the way.

Being from the Detroit Area, Lauren is an avid fan of the Red Wings, Lions, and Tigers. She also enjoys skiing and snowboarding and spends most of her free time in the winter doing one of these activities. Both of her maternal grandparents are from the Baraga/L'Anse area so she has many relatives in the area. Lauren is excited to be part of the KBIC NRD and looks forward to meeting more members of the community. For more information about the air program, contact Lauren at (906) 524-5757 ext. 28.



*Lauren Nenadovich*



## *Sand Point Wildlife Habitat Restoration Nears Completion*

A two year Great Lakes Restoration Initiative (GLRI) project is nearing completion for the restoration of 33.5 acres of capped stamp sands on Sand Point. Two gardens are installed; one at the south entrance and one at the center entrance. Planting of native species in the south garden has been taking place for two growing seasons and looks spectacular. Soil and seed were added in the center garden and plantings will take place this fall with growth expected in the spring of 2013. Improvements with weed control and additional planting will continue for both gardens throughout the study area for years to come. Native plant species selected for this project were those most likely to survive the harsh conditions of the coastal stamp sands and their benefit to birds, wildlife, and pollinators.

Fifty-eight soil mounds and 34 half-acre seed plots were installed and planted with 29 species of native wild seed. Measuring the success and number of species growing in these seed plots took place in



*Seed plot and trees at Sand Point in May*

August. Nineteen species of trees and shrubs have also been planted throughout the 33.5 acres. These plantings will help protect the cap and provide shelter from the wind and blazing sun so a greater variety of plant species can survive on the site. Over time the mounds, trees, shrubs, and decorative boulders (yet to be placed) will help to lift and change the steady wind blowing from the lake. This will provide areas of suitable microclimate that are better for long-term plant growth.

The true results of this restoration project will take years to be realized. Be sure to visit Sand Point often to witness the awesome natural progression and establishment of the plant species. Some plants will survive, and some will perish. The NRD plans to monitor and maintain this site indefinitely through our native plant and wildlife habitat improvement programs.



*Site preparation for the north end one acre garden*



*Native plants flourish in the one acre garden at the south end of the restoration site*



## Mining Updates and Information

### Eagle Project Updates

As of September 5, the mine tunnel at the Rio Tinto Eagle sulfide mine site on the Yellow Dog Plains was reported to be about a mile long and more than 80% complete with ore production planned to begin in 2014.

The permitting of the Eagle Project was the first test of Michigan's sulfide mining law that was adopted in 2004. Despite extensive expert testimony stating the risks of the mine to people, wildlife and natural areas, the state issued Rio Tinto permits for the project in 2007. On August 8, the Michigan Court of Appeals agreed to hear the KBIC's and its partner's legal challenge for the permitting of the Eagle Project. Recently, the KBIC Tribal Council approved a contract with Schwabe Williamson & Wyatt PC to hire attorney Connie Sue Martin, a highly regarded specialist in Indian and federal environmental law, to assist the KBIC's legal team in the appeal.



*Aerial photo of the Humboldt processing site, September 2012, courtesy Jeremiah Eagle Eye. The lake located in the top left hand corner is where the tailings are to be slurried and left into perpetuity.*

Construction is currently active at the related Rio Tinto Humboldt processing site where the company plans to deposit approximately 2.5 million tons of sulfide waste tailings from the Eagle Project. Rio Tinto administrative offices have also recently moved from Ishpeming to the Humboldt site.

On August 28, the U.S. Environmental Protection Agency (EPA) held a Public Hearing on the proposed wetland fill for Marquette County Road 595 that would make a direct ore transportation route from the Eagle Project to the Humboldt Mill. The proposed road would directly impact about 26 acres of high quality wetland and require 22 stream crossings. If the EPA maintains its objection, in which it determined a failure of the applicant to comply with federal Clean Water Act Section 404 guidelines, the applicant would have to reapply for a permit through the U.S. Army Corps of Engineers. The KBIC's comments to the EPA are available at: [https://docs.google.com/file/d/0B\\_kyAoX0so8\\_Wm9WSTV4R0RUeFE/edit?pli=1](https://docs.google.com/file/d/0B_kyAoX0so8_Wm9WSTV4R0RUeFE/edit?pli=1)

As of this year, there has been no known additional exploratory drilling at the on-reservation BIC (Bovine Igneous Complex) site.

Rio Tinto has announced it is hosting a series of community forums in the region. For more information, contact Jessica Koski, Mining Technical Assistant at 906-524-5757 ext. 25 or [jkoski@kbic-nsn.gov](mailto:jkoski@kbic-nsn.gov).

### Additional Mining Updates

The **Orvana Copperwood Project** proposed wetland fill permit for a very large tailings basin recently received a federal EPA objection under the Clean Water Act Section 404, similar to the proposed Marquette County Road 595. The copper mine, located in Gogebic County, would directly fill in approximately 59 acres of wetland and over 13,000 feet of streams that discharge directly to Lake Superior. The EPA said "the Copperwood Project, as described in the permit application, will cause significant degradation of waters of the U.S., and the proposed stream and wetland mitigation plan would not fully compensate for those impacts."

The **Back Forty project** is on hold for now. HudBay Minerals has severed its business ties with Aquila Resources at the proposed zinc and gold sulfide mine on the Menominee River. Aquila is looking for another partner to invest in the project that was close to entering the MI mine permit review process.



*Lake Superior shoreline near Orvana Copperwood project site, Ontonagon County*



### Mining Updates Continued

**Trans Superior Resources, Inc.** (a subsidiary of Canadian based Bitterroot Resources) has identified a prospective exploration site about 47 miles southwest of the Eagle Project. Their exploration interests cover about 360 square miles and several copper and nickel targets, included within the Ottawa National Forest. For more information about the company's prospective mineral drilling in the National Forest, visit: [http://www.fs.fed.us/nepa/nepa\\_project\\_exp.php?project=38891](http://www.fs.fed.us/nepa/nepa_project_exp.php?project=38891). An Environmental Assessment for the exploration project will be released for public review and comment on September 22.

On July 24, a federal court ruled that the **Flambeau Mining Company**, a subsidiary of Kennecott/Rio Tinto, violated the Clean Water Act on multiple occasions by allowing pollution from its Flambeau Mine site, near Ladysmith, Wisconsin, to enter the Flambeau River and a nearby tributary. Monitoring data from the mining company and the Wisconsin Department of Natural Resources showed that copper levels in the discharges from a detention basin exceeded Wisconsin's acute toxicity criterion set to protect fish and other aquatic species, sometimes by several times. This mine is highly regarded as a model mine for other sulfide mining activities in Michigan.



*Bald eagle near proposed Orvana Copperwood project site, Ontonagon County. Photo credit: Bad River Band Environmental Department*

**On Friday, September 28 from 1-5pm, the Lake Superior Binational Forum** will host a Public Meeting on the Impacts of Non-ferrous Mining in the Lake Superior Basin at the Peter White Public Library in Marquette. For more information, visit: <http://www.superiorforum.org/meetings/september-28-2012-marquette-michigan>. A presentation of particular interest may be recommendations from a recent National Wildlife Foundation report on sulfide mining regulation in the Lake Superior basin, to read the full report visit: [www.nwf.org/sulfidemining](http://www.nwf.org/sulfidemining).

Interested in keeping up to speed on mining related news and events via email? To sign up today, contact Jessica Koski at 906-524-5757 or [jkoski@kbic-nsn.gov](mailto:jkoski@kbic-nsn.gov).



*Proposed County Road 595 Corridor, Marquette County*



*Existing road and proposed wetland fill area for County Road 595*

## *Fall/Winter Calendar of Events*

**September 18, 3pm:** KBIC Natural Resources Committee Meeting. For more information contact Charlotte Loonsfoot at 906-353-8152.

**September 20, 10am-3pm:** KISMA (Keweenaw Invasive Species Management Area) all-partners meeting at Keweenaw National Historical Park Headquarters, Calumet.

**September 28, 1-4:30pm:** Lake Superior Binational Forum Public Meeting “The Impacts of Nonferrous Mining in the Lake Superior Basin: Overview and Updates” on Friday, September 28, Peter White Public Library, Marquette, Michigan. Free and open to the public.

**September 28:** Michigan Indian Day; Tribal Government Offices Closed

**September 28-30:** Western Mining Action Network Great Lakes Caucus Meeting, Marquette, MI.

**September 29, 10:00am-2:00pm:** Household Hazardous and Electronic Waste Collection, Ojibwa Casino Parking Lot on M38.

**October 16:** Invasive Plant Conference, Marquette, MI.

**November 11:** Veteran’s Day

**November 12:** Veteran’s Day Observed; Tribal Government Offices Closed

**November 22:** Thanksgiving Day; Tribal Government Offices Closed

**November 23:** Native American Heritage Day; Tribal Government Offices Closed

**December 9-12:** 73<sup>rd</sup> Midwest Fish & Wildlife Conference, Wichita, Kansas: <http://www.midwestfw.org/>

**December 24, 25, 26 & 31:** Tribal Government Offices Closed

**January 1, 2013:** Tribal Government Offices Closed

To receive the KBIC NRD Newsletter  
electronically contact

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**Look for us on the web in October!**



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